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| APPLICATION NO.  | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|--|-------------|----------------------|---------------------|------------------|
| 10/616,064   | 07/08/2003  | Gary R. Janik        | KLA-005             | 9958             |
| 32357  | 7590        | 12/28/2005           | EXAMINER            |                  |
| BEVER, HOFFMAN & HARMS, LLP<br>1432 CONCANNON BLVD<br>BLDG G<br>LIVERMORE, CA 94550-6006 |             |                      | PUNNOOSE, ROY M     |                  |
|  |             |                      | ART UNIT            | PAPER NUMBER     |
|  |             |                      | 2877                |                  |

DATE MAILED: 12/28/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

|                              |                               |                              |  |
|------------------------------|-------------------------------|------------------------------|--|
| <b>Office Action Summary</b> | Application No.<br>10/616,064 | Applicant(s)<br>JANIK ET AL. |  |
|                              | Examiner<br>Roy M. Punnoose   | Art Unit<br>2877             |  |

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 12 October 2005.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1-47 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-6, 9, 10, 21-23, 29, 30 and 40-45 is/are rejected.
- 7) ☒ Claim(s) 7, 8, 11-20, 24-28, 31-39, 46 and 47 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 08 July 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

**DETAILED ACTION**

***Response to Restriction Requirement***

1. Applicant's arguments to the restriction requirement of the previous office action have been accepted and consequently the restriction requirement has been withdrawn by the Examiner. Currently, claims 1-47 are pending in the application.

***Claim Rejections - 35 USC § 112***

2. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

3. Claims 1, 21 and 40 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claim(s) contains subject matter, which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention. The recitation "directing a cleaning beam at analysis location during metrology operation" in claims 1, 21 and 40 is not supported by the specification because of applicant disclosure on page 5, paragraph [0013] of "interleaving cleaning and analysis operation." "During metrology operation" indicates that the metrology operation and directing the cleaning beam is done "simultaneously." On the other hand the specification discloses the operation is interleaved, indicating that "directing cleaning beam" and metrology operation" are done in a sequential manner in a continuously. Directing a beam could also mean that the beam is merely "aimed" without actually delivering the required energy. Appropriate correction is required.

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4. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

5. Claim 9 recites the limitation "the measurement beam" in lines 4-5. There is insufficient antecedent basis for this limitation in the claim. The claimed "measurement beam" is not disclosed in the parent claim, claim 1.

6. Claim 11 recites the limitation "the measurement beam" in lines 4-5. There is insufficient antecedent basis for this limitation in the claim. The claimed "measurement beam" is not disclosed in the parent claim, claim 1.

7. Claim 12 recites the limitation "the measurement beam" in lines 5, 7, 9 and 12. There is insufficient antecedent basis for this limitation in the claim. The claimed "measurement beam" is not disclosed in the parent claim, claim 1.

8. Claim 13 recites the limitation "the measurement beam" in line 6. There is insufficient antecedent basis for this limitation in the claim. The claimed "measurement beam" is not disclosed in the parent claim, claim 12.

9. Claim 14 recites the limitation "the measurement beam" in lines 1-2. There is insufficient antecedent basis for this limitation in the claim. The claimed "measurement beam" is not disclosed in the parent claim, claim 13.

10. Claim 15 recites the limitation "the measurement beam" in line 6. There is insufficient antecedent basis for this limitation in the claim. The claimed "measurement beam" is not disclosed in the parent claim, claim 1.

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11. Claim 17 recites the limitation "the measurement beam" in lines 5-6. There is insufficient antecedent basis for this limitation in the claim. The claimed "measurement beam" is not disclosed in the parent claim, claim 1.

12. Claim 19 recites the limitation "the measurement beam" in line 5. There is insufficient antecedent basis for this limitation in the claim. The claimed "measurement beam" is not disclosed in the parent claim, claim 1.

***Claim Rejections - 35 USC § 102***

13. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

14. Claims 1-6, 9-10, 21-22, 29-30, 40-41 and 43-45 are rejected under 35 U.S.C. 102(e) as being anticipated by Rosencwaig et al (US\_6,930,771).

15. Rosencwaig et al (Rosencwaig hereinafter) discloses a method and system for analyzing a thin film test sample (see col.1, line 15) comprising performing metrology operation directing a beam at an analysis location during metrology operation with ellipsometer (see col.4, lines 26-51, and specifically lines 36-37), wherein the cleaning beam comprises a pulsed beam (see col.6, lines 58-64).

***Claim Rejections - 35 USC § 103***

16. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

17. Claims 23 and 42 are rejected under 35 U.S.C. 103(a) as being unpatentable over Rosencwaig et al (US\_6,930,771).

18. In view of Rosencwaig's teaching of using a laser 43 (see Figure1), it would have been obvious to one of ordinary skill in the art to select any type of laser to obtain a desired result in the testing of a thin film wafer.

***Allowable Subject Matter***

19. Claims 7-8, 11-20, 24-28, 31-39 and 46-47 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

***Conclusion***

20. Any inquiry concerning this communication or earlier communications from the examiner should be directed to **Roy M. Punnoose** whose telephone number is **571-272-2427**. The examiner can normally be reached on 9:00 AM - 5:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, **Gregory J. Toatley, Jr.** can be reached on **571-272-2800 ext.77**. The fax phone number for the organization where this application or proceeding is assigned is **571-273-8300**.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

**Roy M. Punnoose**  
Patent Examiner  
Art Unit 2877  
December 27, 2005

  
FOA

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**Gregory J. Toatley, Jr.**  
Supervisory Patent Examiner